WHAT IS CLAIMED IS:

1. An optical filter comprising a slanted Bragg grating inscribed in an optical fiber portion comprising a core having a refractive index n_1 and a radius R_{core} and a cladding having an average refractive index n_2 lower than n_1 and a radius $R_{cladding}$, the core and the cladding of the fiber being doped with a photosensitive dopant in the fiber portion comprising the Bragg grating, which filter is characterized in that, in the fiber portion comprising the Bragg grating, the photosensitivity of the cladding is greater than the photosensitivity of the core and the cladding includes an index step area having a refractive index n_3 greater than n_2 and less than n_1, said index step area having a width L defined by an inside radius R_{s1} greater than or equal to the radius R_{core} of the core and an outside radius R_{s2} less than or equal to the radius $R_{cladding}$ of the cladding.

2. An optical filter according to claim 1, characterized in that the index difference between the core and the cladding ($\Delta n_{core} = n_1 - n_2$) is in the range 0.003 to 0.006.

3. An optical fiber according to claim 1, characterized in that the index difference between the cladding and the index step area ($\Delta n_{step} = n_3 - n_2$) is in the range 0.0004 to 0.001.

4. An optical filter according to claim 1, characterized in that the width of the index step area ($L = R_{s2} - R_{s1}$) is in the range 4 μm to 20 μm.

5. An optical filter according to claim 1, characterized in that the inside radius R_{s1} of the index step area of the cladding is in the range from the radius R_{core} of the core of the fiber to R_{core} + 10 μm.

6. An optical gain flattening filter including an optical

filter comprising a slanted Bragg grating inscribed in an optical fiber portion comprising a core having a refractive index n_1 and a radius R_{core} and a cladding having an average refractive index n_2 lower than n_1 and a radius $R_{cladding}$, the core and the cladding of the fiber being doped with a photosensitive dopant in the fiber portion comprising the Bragg grating, which filter is characterized in that, in the fiber portion comprising the Bragg grating, the photosensitivity of the cladding is greater than the photosensitivity of the core and the cladding includes an index step area having a refractive index n_3 greater than n_2 and less than n_1, said index step area having a width L defined by an inside radius R_{s1} greater than or equal to the radius R_{core} of the core and an outside radius R_{s2} less than or equal to the radius $R_{cladding}$ of the cladding.